



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/911,305 | 07/23/2001 | Tetsuo Fukami | 10873.770US01 | 3596 |

7590 09/10/2003

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

EXAMINER

DUONG, TAI V

ART UNIT PAPER NUMBER

2871

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/911,305

Applicant(s)

FUKAMI ET AL. 

Examiner

TAI DUONG

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-17 is/are pending in the application.
- 4a) Of the above claim(s) 4-12 and 14-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2871

Applicant's election of Species A (Figs. 1A-B), claim 3, in Paper No. 6 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 4-12 and 14-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Amended claim 1 is no longer generic because it is the combination of original claims 1 and 3.

The disclosure is objected to because it is not consistent with the drawings. Figs. 1A-B and 2 show that the overlapping portion of the pixel electrode 3 with the common electrode 4 is a capacitive accumulation portion 7, not with the opposing electrode 8 as disclosed at lines 21, 25 and 31 of page 8, and lines 1 and 6 of page 9. Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is not consistent with the specification and the drawings because it recites "wherein the value of the storage capacity in said capacitive accumulation

Art Unit: 2871

portion is varied by forming an aperture in the electrode comprising said capacitive accumulation". The value of the storage capacity in said capacitive accumulation portion is not varied by the step of forming an aperture in the (common) electrode, but is varied by varying the apertures in the common electrode at the pixel areas of adjacent pixels. For example, the value of the storage capacity in the capacitive accumulation portion is not varied or changed by forming the same aperture in the common electrode comprising said capacitive accumulation. Also, in line 6, the recited feature "the respective pixels" lacks antecedent basis. In addition, lines 6-8, the recited feature "a value of a storage capacity ... the value on the feeding side being larger than the value on the termination side" is confusing because it refers as that the liquid crystal display has only one pixel electrode, one storage capacity and one capacitive accumulation portion. This issue is also applied to the value of the storage capacity of claim 2. In claim 1, line 10, ("by forming an aperture in the electrode comprising said capacitive accumulation"), it is unclear in which electrode, pixel electrode or common electrode, that the aperture is formed. Claims 2 and 13 are also rejected since they depend on the indefinite claim.

The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art of record discloses or suggests that the value of the storage capacity of the capacitive accumulation of the pixel at the signal terminal side is larger than that of the pixel at the side opposite to that the signal terminal side, wherein the value of the storage capacity in the capacitive accumulation of one pixel is different from

Art Unit: 2871

that of the pixel adjacent to said one pixel by varying the aperture in the common electrode of said adjacent pixel with respect to the aperture of said one pixel.

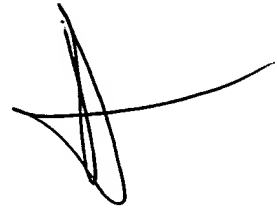
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takagi discloses the width of gate line becomes narrower and thereby capacitance of auxiliary capacitor portions becomes smaller as the distance from the gate signal input portion becomes larger.

Any inquiry concerning this communication should be directed to Tai Duong at telephone number 703 308-4873.



TVD



KENNETH PARKER
PRIMARY EXAMINER